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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,204	06/05/2001	Herbert Heyneker	018501000120	6403
28393	7590	08/25/2004	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVE., N.W. WASHINGTON, DC 20005			LUDLOW, JAN M	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/875,204

Applicant(s)

HEYNEKER ET AL.

Examiner

Jan M. Ludlow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 47-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. The restriction requirement is withdrawn in view of the amendment.
2. Claims 47-63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Throughout the claims, "for synthesizing a polymer" in the preamble is indefinite because it is unclear what structural limitations this term intends. Applicant has argued that the prior art apparatuses are not polymer synthesizers, but it is the examiner's position that the choice of reagent intended to be used in the apparatus does not define the apparatus unless the reagents are positively recited as elements of the invention. In claim 49, "the base" lacks antecedence. Claims 51, 55, 56 are unclear because it is unclear what limitation is intended: A pipette station and an incubation station, for example, satisfy the limitations because each is disclosed herein as being used in a series of steps to synthesize polymers. Further, it is unclear what structural limitation is intended by the method step "performs a physical step...." Claim 52, 57 are unclear because it is unclear whether or not the reagents are positively recited.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 47-49, 51-52, 56-57, 60-62 are rejected under 35 U.S.C. 102(b) as being anticipated by Harris et al (USP 4,871,683).

Harris et al disclose a reaction system substantially as claimed. The system comprises a carousel 12 with a plurality of reaction mounts 20 holding solid support (filter 22 or other supports (col. 4, line 26)) in well 58 arranged on the radius of the carousel, a rotator 74, 76 that rotates the carousel step-wise around the axis, a fluid delivery system 100 that delivers liquid to the reaction well, a drain system 112, 114 that

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drains the liquid by differential pressure from the well, optical analyzer (col. 6, lines 50-65), temperature control (col. 7, lines 25-30), and a programmable digital computer that controls the system 162 (columns 3-7, Figs 1, 4-5). The through hole 60 in the carousel which holds the reaction mount 20 constitutes the instant conduit and the portion below support 22 constitutes the chamber. Outlet 40 protrudes from the carousel as claimed.

9. Claims 50, 53-55, 58, 59, 63 are rejected under 35 U.S.C. 103(a) as being obvious over Harris as applied to claims above and further in view of Raysberg et al (USP 5,106,583).

Harris fails to teach plural wells per mount or radially moveable dispense heads or movement of the drain receptacle 112.

Raysberg et al teach a carousel 19 with a plurality of reaction mounts with reaction wells 3 arranged on the radius of the carousel, a rotator that rotates the carousel step-wise around the axis (column 4, lines 32-41), a fluid delivery system 33 that delivers liquid to the reaction wells, a drain system 35 that drains the liquid by differential pressure from the wells, a programmable digital computer that controls the system 153 (columns 3-7, Figs 1, 4-5). The fluid delivery system is moveable radially as shown at arrow 113 of Figure 1d, and into and out of engagement with the mount (col. 2, lines 40-50).

It would have been obvious to provide plural reaction wells in a sample mount of Harris as taught by Raysberg in order to increase carousel capacity. It would have been obvious to make the dispenser of Harris radially moveable as taught by Raysberg in order to access the mounts and/or remove the dispenser from the carousel as shown

by Raysberg. It would have been obvious to move the drain 112 of Harris with respect to the carousel in order to use vacuum instead of or in addition to pressure to drain the mounts as taught by Raysberg.

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 47-48, 50-52, 56-61 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6264891. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the instant claims are found within the narrower patented claims.

12. Applicant's arguments filed March 26, 2004 have been fully considered but they are not persuasive.

13. Applicant argues that neither Harris nor Raysberg teaches synthesizing a polymer, but the instant claims are apparatus claims, not method claims, and the intended use of the apparatus is not seen to limit its structure. Applicant argues that neither reference teaches reagents for synthesizing a polymer, but the reagents are not

positively recited elements of the invention. Applicant argues that the references do not teach a plurality of workstations performing a physical step in a series of polymer synthesis steps, but in that Harris teaches e.g., plural pipetting, wash and incubation stations, which are stations disclosed as works stations useful in synthesis, the claim limitation is satisfied. Applicant argues that neither reference teaches raising the drain element, but Raysberg so teaches.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-

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1260. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jan M. Ludlow  
Primary Examiner  
Art Unit 1743

Jml  
August 23, 2004